



C A L I F O R N I A E N E R G Y C O M M I S S I O N

Geothermal Grant and Loan Program (GRDA) – Mineral Recovery From Geothermal Brines

Pre-Solicitation Staff Workshop

Wednesday, January 18, 2017

Sacramento, California

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Workshop Agenda

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| II. Program Background | X. National Environmental Policy Act (NEPA) |
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| VIII. Upcoming Mineral Recovery from Geothermal Brines GFO | XVI. Information Resources |



I. Workshop Purpose

- Opportunity to learn about the Geothermal Grant and Loan Program requirements and process.
- Heads-up on upcoming grant solicitation.
- Chance to think ahead for project planning and development of grant applications.



II. Program Background

- Established by the California Legislature in 1980.
- First decade provided funding and technical assistance to local jurisdictions for geothermal direct use, planning, and mitigation projects.
- In 1992, program expanded to provide grants and loans to private entities and local jurisdictions for both geothermal direct use and electrical generation projects and technologies.



II. Program Background (cont.)

- Also known as the GRDA Program after its Geothermal Resources Development Account funding source.
- Uses revenues paid to the state from geothermal royalties and leases on federal lands in California.
- Program currently awards grant funding every 2 - 3 years using competitive solicitations called Grant Funding Opportunities (GFO).



III. Program Statute and Regulations*

Statute:

- Public Resources Code (PRC), Sections 3800 – 3827
- Defines who can apply and what activities can be funded.

Regulations:

- Title 20, California Code of Regulations (CCR), Sections 1660 – 1665 and Appendix A
- Defines application and award procedures, and scoring criteria.

*** GRDA Program statute and regulations are available at:
http://www.energy.ca.gov/geothermal/grda_regs.html**



IV. Recent Legislation and Changes to Statute

Senate Bill (SB) 1074*

- Added subsection 3823(l) to the PRC list of activities that can be funded by the Geothermal Grant and Loan Program:

(l) In furtherance of the state's zero-emission vehicle and energy storage objectives, undertaking projects to recover lithium, metals, agricultural products, and other beneficial minerals from highly mineralized geothermal brines at a geothermal facility in existence on January 1, 2017, that is in a disadvantaged community and provides local employment opportunities.

*Hueso, Chapter 539, Statutes of 2016



IV. Recent Legislation and Changes to Statute (cont.)

- Allocates \$2.5 million from 2016/2017 American Recovery and Reinvestment Act of 2009 (ARRA) funds for projects under newly added Public Resources Code section 3823(l).
- Directs the Energy Commission to hold a competitive solicitation for projects under PRC 3823(l) no later than February 1, 2017, using the allocated ARRA funds.



Questions ?



V. Eligible Projects

Must meet all of the following:

1. The project is for recovery of lithium, metals, agricultural products, or other beneficial minerals from highly mineralized geothermal brines;
2. The project is located at a geothermal facility in existence on January 1, 2017, that is in a disadvantaged community* and provides local employment opportunities; and
3. The project uses commercially available technologies for the mineral or product recovery processes. “Commercially Available” means: *Available for purchase by the general public or target audience in the State.*

*Disadvantaged community as designated by CalEPA using the California Communities Environmental Health Screening Tool, “CalEnviroScreen” at <http://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>



VI. Who Can Apply

Local Jurisdiction*:

- Any unit of Indian govern.
- Any city, county, or district, including, but not limited to, regional planning agencies and public utility districts.
- Excludes public utility districts that generate for sale more than 50 MW of electricity.

* PRC 3807

Private Entity*:

- Any individual or organization engaged in the exploration and development of geothermal energy for profit.

*PRC 3809



VI. Who Can Apply (cont.)

- Counties of origin are not restricted from applying for funding.
- Federal agencies and labs, state universities, and state agencies:
 - ✗ not eligible to apply for funding;
 - ✓ may be eligible as a project partner or subcontractor.



VII. Additional Eligibility Requirements

Local Jurisdiction:

- Must provide a resolution from its governing body authorizing submittal of the grant application. (Resolution must also designate an authorized representative to execute the grant agreement.)
- Must provide a minimum match contribution of 20% of the total project cost.

Private Entity:

- Must provide a minimum match contribution of 50% of the total project cost.
- Grant project must provide tangible benefits to a local jurisdiction.
- Receipt of grant award must be approved by the city, county or Indian reservation where the project is to be located.



Questions ?



VIII. Upcoming Mineral Recovery from Geothermal Brines GFO

- Anticipate GFO publication in late January, 2017.
- GFO is a competitive grant solicitation. Minimum passing score is 70%.
- \$2.5 million available to fund selected projects.
- Grant agreements expected to start in late June 2017 and end in March 2020.



IX. California Environmental Quality Act (CEQA)

- Before approving a grant agreement, the Energy Commission must make a determination whether or not a decision approving an award for a project is in compliance with CEQA.
- All applications must provide documentation of project compliance with CEQA.
- Cannot “piecemeal” CEQA – compliance for the entire project must be demonstrated.
- Should consider CEQA compliance when planning project activities and scope of work.
- Contact CEQA lead agency in the area of project activities for guidance and preparation of appropriate documents.



X. National Environmental Policy Act (NEPA)

- Compliance with NEPA required because funding is federal.
- Applications must include a completed NEPA Environmental Questionnaire.
- NEPA information for selected projects will be given to the United States Department of Energy for NEPA evaluation and determination.
- Approved projects cannot start work until a NEPA determination is made.



Questions ?



XI. Application/Award Process

- Publication of GFO
- Pre-Application Workshop
- GFO Questions/Answers
- Applications Due (approx. 6 weeks from GFO publication)
- Application Evaluation
 - Administrative Screening
 - Technical Evaluation and Scoring
- Notice of Proposed Award (NOPA)
- Grant Agreement Development
 - CEQA compliance required
- Approval at a Business Meeting
- 30-day Review/Comment Period (DOF, Leg Analyst, and Leg Budget Committee)
- Execute Agreement
- NEPA Compliance (before start work).



XII. Application Elements

- Application Form
- Project Narrative (no more than 25 pages)
- Scope of Work
- Schedule
- Project Team
- Budget Forms
- Contacts List
- CEQA Worksheet and Documentation
- NEPA Environmental Questionnaire
- Resolution (for Local Jurisdictions)



XIII. Technical Scoring Criteria

- Demonstrated Need or Value (20 points)
- Proven Extent of Resource (15 points)
- Contribution to Geothermal Energy Development (15 points)
- Likelihood of Success (15 points)
- Public Involvement (10 points)
- Payback and Cost Effectiveness (10 points)
- Economic and Employment Benefit (10 points)
- Match Contribution (5 points)



Questions ?



XIV. Suggestions for Preparing Applications

- Read the GFO and all attachments carefully before starting application.
- If you have any questions about the GFO documents or what is required, please submit a formal question by the due date.
- Ensure that all application elements are clear, logical and well written.
- Be sure to submit the application and all attachments in the required formats.
- Fill out all required forms and attachments completely, especially the budget template.
- Provide thoughtful discussion and information in the project narrative that is responsive to the scoring criteria questions.



XV. Things to Remember

- **Projects must use commercially available technologies for the mineral or product recovery. Research & Development not eligible.**
- Local jurisdiction applications must include a resolution from their governing body approving submittal of the application. Resolution must also name a representative to act on behalf of the local jurisdiction for grant matters.
- Private entity applications need to show how project provides tangible benefits to a local jurisdiction, per PRC 3822(g)(2).
- Private entity applications must discuss how applicant will obtain local agency approval if awarded funding, per 20 CCR 1665(a)(8).
- Applications must include CEQA compliance documentation, per 20 CCR 1665(a)(9).
- Applications must include a completed NEPA Environmental Questionnaire.



XVI. Information Resources

- **California Energy Commission/GRDA Program**

<http://www.energy.ca.gov/geothermal/grda.html>

- **CEQA**

California Natural Resources Agency CEQA FAQs:

<http://resources.ca.gov/ceqa/more/faq.html>



Questions ?